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AN - 97:73380 CA

TI - Binders for shell molds

PA - Aisin Kako Co., Ltd., Japan; Toyota Motor Co., Ltd.

SO - Jpn. Kokai Tokkyo Koho, 4 PP.

CODEN: JKXXAF

DT - Patent

LA - Japanese

IC - C08G008-08; B22C001-22

CC - 37-3 (Plastics Manufacture and Processing)

## FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PN	JP57059925	A2	19820410	JP 1980-136512	19800929
	JP60056729B	B4	19851211		

PRAI- JP 1980-136512 19800929

AB - Shell mold binders are prep'd. from PhOH 100, bisphenol A distn. residues 100-1000, and HCHO 20-520 parts in the presence of acid or base catalysts. Thus, a mixt. of PhOH 120, distn. residues 480, 37% HCHO 257, and oxalic acid 2.1 g was refluxed 150 min, adjusted to pH 3-4 with ethanolamine, dehydrated at 700 mm until the temp. reached 180.degree., mixed with 19 g wax and 19 g salicylic acid, and cooled to give a resin having m.p. 73.degree. and wt.-av. mol. wt. 1810. A compn. of sand (preheated at 160.degree.) 8000, the above resin 160, hexamethylenetetramine 24, H<sub>2</sub>O 120, and Ca stearate 8 g was stirred to give shell mold materials having setting temp. 101.degree., flexural strength (cured product) 34.9 kg/cm<sup>2</sup>, and expansion by sudden heating 1.34%, compared with 103, 32.3, and 1.51, resp., for a similar compn. contg. a conventional novolak resin binder.

ST - shell mold binder resin; bisphenol A distn residue ; phenolic resin binder

IT - Phenolic resins, preparation

RL: PREP (Preparation)  
(manuf. of, from distn. residues of bisphenol A, for shell mold binders)

IT - Molds (forms)

(shell, binders for, phenolic resins based on distn. residues of bisphenol A as)

IT - 50-00-0D, polymers with bisphenol A distn. residues and phenol 108-95-2D, polymers with formaldehyde and bisphenol A distn. residues

RL: USES (Uses)  
(binders, for shell molds)